

MVL-KF1640-25MP

1.2" 16 mm 25 MP FA Lens

KF-P anti vibration series FA Lens are optimized for machine vision light sources and sensors, with high resolution, excellent image uniformity and good stability. Featured with fixed focal length, fixed iris and compact size, it is suitable for machine vision industry applications.



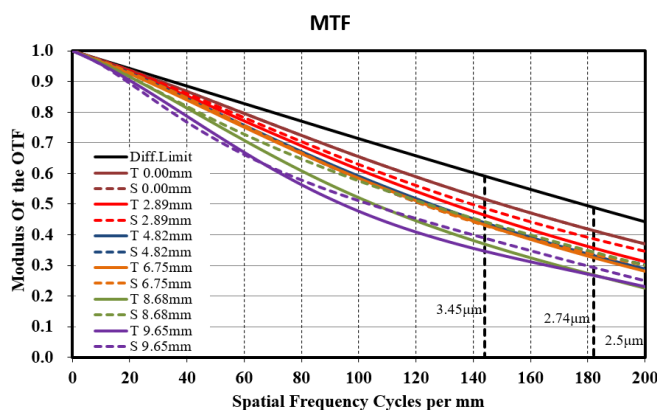
Key Features

- Ultra high resolution, high consistency in image center and edge clarity
- 1.2" image size, F4 fixed iris, structurally stable
- Ultra low distortion, high peripheral brightness ratio
- Maintain excellent optical properties at different object distances
- Excellent resistance to vibration, impact, and high and low temperature stability

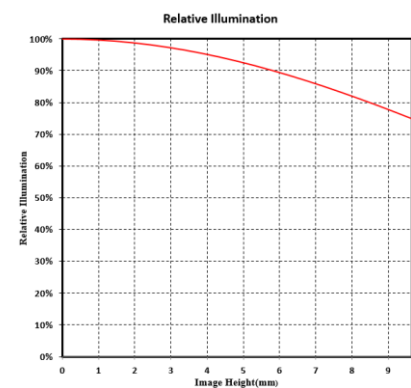
Distortion



MTF



Relative Illumination

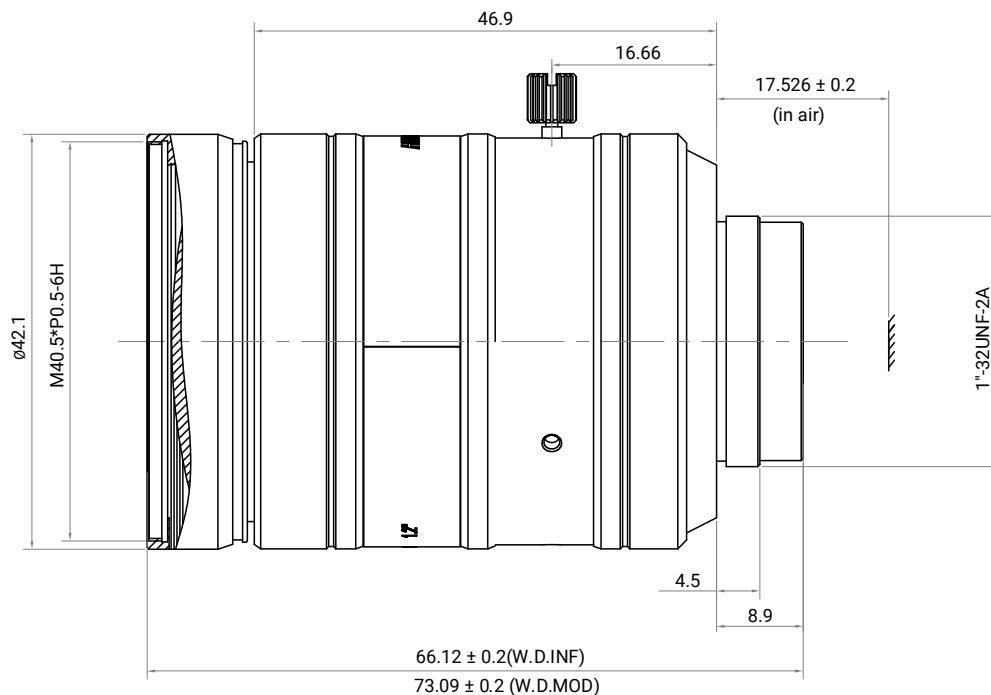


Note: The above curves are the simulate results based on F4, $\beta=-0.05$, WD=300 mm

Specification

Parameter	Model	MVL-KF1640-25MP
	Fixed Focal Length, Fixed Iris, 25 MP, FA Lens	
Performance		
Focal length	16 mm	
F-number	F4.0	
Image size	Ø19.3 mm (1.2")	
Distortion	0.04%	
Minimum object distance	0.08 m	
Field of view	D (17.52 mm): 61.7° H (14.14 mm): 48.77° V (10.35 mm): 42.83°	
Mechanical		
Iris control	Fixed	
Focus control	Manual	
Filter thread	M40.5 × P0.5	
Mount	C-mount	
Flange back length	17.526 mm	
Dimension	Ø42.1 mm × 57.22 mm to 64.19 mm (Ø1.7" × 2.3" to 2.5")	
Weight	185 g (0.4 lb.)	
Temperature	−10°C to 50°C (14 °F to 122 °F)	
General		
Certification	RoHS 2.0	

Dimension



Unit: mm

Field of View

Extension (mm)	Working Distance (mm)	Magnific ation	Field of View (mm)					
			1.2"		1.1"		1"	
			H (14.6 mm)	V (12.63 mm)	H (14.14 mm)	V (10.35 mm)	H (13.31 mm)	V (8.76 mm)
0	80	−0.179	81.4	70.4	78.9	57.7	74.2	48.9
	100	−0.145	100.5	86.9	97.3	71.2	91.6	60.3
	150	−0.099	148.2	128.2	143.5	105.1	135.1	88.9
	200	−0.075	195.9	169.5	189.7	138.9	178.6	117.5
	250	−0.060	243.6	210.7	235.9	172.7	222.1	146.2
	300	−0.050	291.3	252.0	282.1	206.5	265.6	174.8
	350	−0.043	339.0	293.3	328.3	240.3	309.1	203.4
	400	−0.038	386.7	334.5	374.5	274.1	352.5	232.0
	450	−0.034	434.4	375.8	420.7	308.0	396.0	260.6
	500	−0.030	482.1	417.1	466.9	341.8	439.5	289.3
	550	−0.028	529.8	458.3	513.1	375.6	483.0	317.9
	600	−0.025	577.5	499.6	559.3	409.4	526.5	346.5
	650	−0.023	625.2	540.9	605.5	443.2	570.0	375.1
	700	−0.022	672.9	582.1	651.7	477.0	613.5	403.8
	800	−0.019	768.3	664.7	744.1	544.7	700.4	461.0
	900	−0.017	863.7	747.2	836.5	612.3	787.4	518.2
	1000	−0.015	959.1	829.7	928.9	679.9	874.4	575.5